



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/633,634

08/05/2003

Hye-Jin Choi

45181

6378

1609

7590

05/29/2008

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

1300 19TH STREET, N.W.

SUITE 600

WASHINGTON,, DC 20036

EXAMINER

BANTAMOL, ANTHONY

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

05/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/633,634

Applicant(s)

CHOI ET AL.

Examiner

ANTHONY BANTAMOI

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-92 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-92 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SG/08)
Paper No(s)/Mail Date 12/21/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 21-92 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 53, 56, and 62-66 are rejected under 35 U.S.C. 102(a) as being anticipated by Nanki et al US Patent Publication 2001/0052126 (hereafter referenced as Nanki).

Regarding claim 53, Nanki disclose a recording medium connected to the reproducing means which reads on "an interface unit for receiving an input signal to access the video and/or audio program among video and/or audio programs stored in the storage device" (figure 2), in addition Nanki discloses an analyzing control unit processes the selected program from the programs recoded on the recording medium to be displayed on the display device which reads on "and a main control unit for providing a program list comprising information regarding the video and/or audio programs and an image corresponding to one of the video and/or audio programs, and accessing the video and/or audio program based on a selection made in a display screen displaying the program list" (0070, figure 4).

Regarding claim 56, Nanki discloses a program guide comprising video/audio data such as program title, channel number, and date which reads on "the apparatus, wherein the program list comprises a list of one or more of title information, recording date information and reproducing time information of the video and/or audio programs, and the image corresponding to the one of the video and/or audio programs" (0065, figure 5).

Regarding claim 62, Nanki discloses a receiving and reproducing device including an external storage device which reads on "a video recording/reproducing apparatus comprising the apparatus, further comprising the storage device to store the video and/or audio programs" (figure 2).

Regarding claim 63, Nanki discloses a receiving and reproducing apparatus capable of recording and reproducing audiovisual data coupled to an external storage device wherein the storage means is a DVD which reads on "the video recording/reproducing apparatus, wherein the video and/or audio recording/reproducing apparatus is a combo-device further comprising a recording/reproducing unit to record/reproduce a video and/or audio program with respect to the storage device, and an optical disc recording and/or reproducing unit to record and/or reproduce a video and/or audio program with respect to a disc" (0021, 0052, figures 2, 6).

Regarding claim 64, Nanki discloses MPEG-2 encoded video/audio data for listed programs which reads on "the video recording/reproducing apparatus of claim

62, wherein the video and/or audio programs stored in the storage device are data compressed according to a predetermined compression format" (0056).

Regarding claim 65, Nanki discloses MPEG-2 encoded video/audio data for listed programs which reads on "the video recording/reproducing apparatus of claim 64, wherein the predetermined compression format is an MPEG compression format" (0056).

Regarding claim 66, Nanki discloses an input port 101 that receives multiple signals via receiver 11 and multiplexer 12 which reads on "the video recording/reproducing apparatus of claim 62, further comprising an input/output terminal unit for receiving a video and/or audio program from a plurality of video and/or audio program sources" (figure 2).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21-24, 30-31, 33-43, 47-48, 54-55, 69-78, and 80-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Bolanos et al US Patent 5,793,364 (hereinafter referred to as Bolanos).

Regarding claim 21, Nanki discloses requesting the contents of a recording medium of a receiving, recording and reproducing device using a remote controller

which reads on "receiving a request signal to access the video and/or audio program among the video and/or audio programs stored in the video and/or audio recording/reproducing apparatus" (0062) in addition Nanki discloses displaying a program guide which reads on "displaying a program list comprising information regarding the video and/or audio programs" (0065, figure 5), in addition Nanki discloses displaying a program by making a selection on the program list which reads on "and accessing the video and/or audio program based on a selection made in a display screen displaying the program list" (0063).

Nanki is silent about an image corresponding to one of the video and/or audio programs. Bolanos discloses a list of audiovisual programs wherein each program has a corresponding image shown in a separate window which reads on "image corresponding to one of the video and/or audio programs" (Column 4, 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding images as taught by Bolanos in order to provide help in making audiovisual program selection.

Regarding claim 22, Nanki is silent about the method, wherein the image corresponding to one of the video and/or audio programs is a still image. Bolanos discloses list of audio visual programs with corresponding still images which reads on "the method, wherein the image corresponding to one of the video and/or audio programs is a still image" (column 4, lines 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding still images as taught by Bolanos in order to provide help in making audiovisual program selection.

Regarding claim 23, Nanki is silent about the method, wherein the still image is an image extracted from a predetermined part of the corresponding video and/or audio program. Bolanos discloses list of audio visual programs with corresponding still images which reads on "the method, wherein the still image is an image extracted from a predetermined part of the corresponding video and/or audio program" (column 4, lines 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding images as taught by Bolanos in order to provide quick scene selections.

Regarding claim 24, Nanki discloses a program title information in a program guide which reads on "the method, wherein the displaying of the program list comprises displaying a list of one or more of title information, recording date information and reproducing time information of the video and/or audio programs" (0054).

Nanki is silent about the image corresponding to the one of the video and/or audio programs. Bolanos discloses list of audio visual programs with corresponding

Art Unit: 2623

still images which reads on "and the image corresponding to the one of the video and/or audio programs" (column 4, lines 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding images as taught by Bolanos in order to provide quick scene selections.

Regarding claim 30, Nanki is silent about the method, further comprising: receiving a request signal to edit the information corresponding to respective one of the video and/or audio programs; and displaying a user input screen to facilitate the editing of the information corresponding to the respective one of the video and/or audio programs. Bolanos discloses program name information editing by user on program list which reads on "the method, further comprising: receiving a request signal to edit the information corresponding to respective one of the video and/or audio programs; and displaying a user input screen to facilitate the editing of the information corresponding to the respective one of the video and/or audio programs" (Column 4, 66-67 and Column 5, 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs guide information editing as taught by Bolanos in order to provide a more flexible program guide.

Regarding claim 31, Nanki discloses a receiving and reproducing apparatus coupled to an external storage device wherein the storage means is a DVD which reads

on "the method, wherein the video and/or audio recording/reproducing apparatus is a combo-device comprising a storage device, a recording/reproducing unit to record/reproduce a video and/or audio program with respect to the storage device, and an optical disc recording and/or reproducing unit to record and/or reproduce a video and/or audio program with respect to a disc" (0021, 0052).

Regarding claim 33, Nanki discloses a storage device connected to the receiving and reproducing device which reads on "the method, wherein the video and/or audio programs are stored in a storage device associated with the video recording/reproducing apparatus" (figure 2).

Regarding claim 34, Nanki discloses user instruction to receiver reproducing device to display program list originating from a remote controller which reads on "the method, wherein the receiving of the request signal comprises receiving the request signal from an external input device" (0062).

Regarding claim 35, Nanki discloses MPEG-2 encoded video/audio data for listed programs which reads on "the method, wherein the video and/or audio programs stored in the video and/or audio recording/reproducing apparatus are data compressed according to a predetermined compression format" (0056).

Regarding claim 36, Nanki discloses MPEG-2 encoded video/audio data for listed programs which reads on "the method, wherein the predetermined compression format is an MPEG compression format" (0056).

Regarding claim 37, Nanki discloses requesting the contents of a recording medium of a receiving, recording and reproducing device using a remote controller

which reads on "receiving a request signal to display the information regarding the video and/or audio programs stored in the video and/or audio recording/reproducing apparatus" (0062) in addition Nanki discloses displaying a program guide including program titles which reads on "displaying the information comprising: one or more of title information, recording date information and reproducing time information of the video and/or audio programs" (0065, figure 5).

Nanki is silent about an image corresponding to one of the video and/or audio programs. Bolanos discloses a list of audiovisual programs wherein each program has a corresponding image shown in a separate window which reads on "an image corresponding to one of the video and/or audio programs" (Column 4, 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding images as taught by Bolanos in order to provide help in making audiovisual program selection.

Regarding claim 38, Nanki discloses encoding and outputting the encoded signal corresponding the to the selected program on program list from recording medium, which reads on "the method, wherein the displaying of the information comprises outputting a signal corresponding to the information by the video recording/reproducing apparatus to display the information on a display screen" (0062).

Regarding claim 39, Nanki discloses a program guide that allows easy access to program on recording medium which reads on "the method, wherein the information is displayed so as to allow access to a video and/or audio program amongst the video

and/or audio programs based on a selection made in the display screen" (0063, figure 5).

Regarding claim 40, Nanki discloses a program title information in a program guide which reads on "the method, wherein the displaying of the information comprises displaying one or more of the title information, recording date information and reproducing time information of each of the video and/or audio programs, and images corresponding to the respective video and/or audio programs" (0054).

Regarding claim 41, Nanki is silent about receiving a request signal to edit the information corresponding to one of the video and/or audio programs. Bolanos discloses the method wherein user has the ability to edit programs on program guide stored in a device memory while being displayed on a screen which reads on "receiving a request signal to edit the information corresponding to one of the video and/or audio programs; and displaying a user input screen to facilitate the editing of the information corresponding to one of the video and/or audio programs" (figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs guide information editing as taught by Bolanos in order to provide a user friendly program guide.

Regarding claim 42, Nanki is silent about the method, wherein the image corresponding to one of the video and/or audio programs is a still image. Bolanos discloses list of audio visual programs with corresponding still images which reads on

"the method, wherein the image corresponding to one of the video and/or audio programs is one of a still image and a motion image" (column 4, lines 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding still images as taught by Bolanos in order to provide help in making audiovisual program selection.

Regarding claim 43, Nanki discloses MPEG-2 encoded video/audio data for listed programs which reads on "the method, wherein the video and/or audio programs stored in the video and/or audio recording/reproducing apparatus are data compressed according to an MPEG compression format" (0056).

Regarding claim 47, Nanki discloses requesting the contents of a recording medium of a receiving, recording and reproducing device using a remote controller which reads on "receiving a request signal to display the information regarding the video and/or audio programs stored in the video and/or audio recording/reproducing apparatus" (0062) in addition Nanki discloses displaying a program guide with program title information which reads on "displaying the information comprising: one or more of title information, recording date information and reproducing time information of one of the video and/or audio programs" (0065, figure 5).

Nanki is silent about images corresponding to the respective video and/or audio programs. Bolanos discloses a list of audiovisual programs wherein each program has a corresponding image shown in a separate window which reads on "images corresponding to the respective video and/or audio programs" (Column 4, 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding images as taught by Bolanos in order to provide help in making audiovisual program selection.

Regarding claim 48, Nanki discloses MPEG-2 encoded video/audio data for listed programs which reads on "the method, wherein the video and/or audio programs stored in the video and/or audio recording/reproducing apparatus are data compressed according to an MPEG compression format" (0056).

Regarding claim 54, Nanki is silent about the apparatus, wherein the image corresponding to one of the video and/or audio programs is a still image. Bolanos discloses list of audio visual programs with corresponding still images which reads on "the apparatus, wherein the image corresponding to one of the video and/or audio programs is a still image" (column 4, lines 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding still images as taught by Bolanos in order to provide help in making audiovisual program selection.

Regarding claim 55, Nanki is silent about the apparatus, wherein the still image is an image extracted from a predetermined part of the corresponding video and/or audio program. Bolanos discloses list of audio visual programs with corresponding still images which reads on "the apparatus, wherein the still image is an image extracted

from a predetermined part of the corresponding video and/or audio program" (column 4, lines 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding images as taught by Bolanos in order to provide fast scene selections.

Regarding claim 69, Nanki discloses a program guide for requesting the contents of a recording medium of a receiving, recording and reproducing device using a remote controller which reads on "an interface unit for receiving a request signal to display the information regarding the video and/or audio programs stored in the storage device" (0062) in addition Nanki discloses displaying a program guide including program titles processed by a controller which reads on "and a main control unit for providing information comprising: one or more of title information, recording date information and reproducing time information of the video and/or audio programs" (0065, figure 5).

Nanki is silent about an image corresponding to one of the video and/or audio programs. Bolanos discloses a list of audiovisual programs wherein each program has a corresponding image shown in a separate window which reads on "and an image corresponding to one of the video and/or audio programs" (Column 4, 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding images as taught by Bolanos in order to provide help in making audiovisual program selection.

Regarding claim 70, Nanki discloses an apparatus for displaying a program guide including program titles processed by a controller which reads on “the apparatus, wherein the main control unit outputs a signal corresponding to the information to display the information on a display screen” (0065).

Regarding claim 71, Nanki discloses a program guide that allows easy access to program on recording medium which reads on “the apparatus; wherein the information is displayed so as to allow access to a video and/or audio program amongst the video and/or audio programs based on a selection made in the display screen” (0063).

Regarding claim 72, Nanki discloses a program title information in a program guide which reads on “the apparatus, wherein the information comprises one or more of the title information, recording date information and reproducing time information of each of the video and/or audio programs, and images corresponding to the respective video and/or audio programs” (0054).

Regarding claim 73, Nanki is silent about the apparatus, wherein: the interface unit further receives a request signal to edit the information corresponding to one of the video and/or audio programs; and the main control unit further provides a user input screen to facilitate the editing of the information corresponding to the one of the video and/or audio programs. Bolanos discloses program name information editing by user on program guide which reads on “the apparatus, wherein: the interface unit further receives a request signal to edit the information corresponding to one of the video and/or audio programs; and the main control unit further provides a user input screen

to facilitate the editing of the information corresponding to the one of the video and/or audio programs" (Column 4, 66-67 and Column 5, 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs guide information editing as taught by Bolanos in order to provide a more flexible program guide.

Regarding claim 74, Nanki is silent about the apparatus, wherein the image corresponding to one of the video and/or audio programs is one of a still image and a motion image. Bolanos discloses list of audio visual programs with corresponding still images which reads on "the apparatus, wherein the image corresponding to one of the video and/or audio programs is one of a still image and a motion image" (column 4, lines 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding still images as taught by Bolanos in order to provide help in making audiovisual program selection.

Regarding claim 75, Nanki discloses DVD as the recording medium which reads on "a video recording/reproducing apparatus comprising the apparatus according, further comprising the storage device to store the video and/or audio program" (0052).

Regarding claim 76, Nanki discloses a receiving and reproducing apparatus capable of recording and reproducing audiovisual data coupled to an external storage device wherein the storage means is a DVD which reads on "the video

Art Unit: 2623

recording/reproducing apparatus, wherein the video and/or audio recording/reproducing apparatus is a combo-device further comprising a recording/reproducing unit to record/reproduce a video and/or audio program with respect to the storage device, and an optical disc recording and/or reproducing unit to record and/or reproduce a video and/or audio program with respect to a disc" (0021, 0052, figures 2, 6).

Regarding claim 77, Nanki discloses MPEG-2 encoded video/audio data for listed programs which reads on "the video recording/reproducing apparatus of claim 75, wherein the video and/or audio programs stored in the storage device are data compressed according to an MPEG compression format" (0056).

Regarding claim 78, Nanki discloses a receiving and reproducing apparatus with an input terminal to receive modulated audio/video/data signals which reads on "the video recording/reproducing apparatus of claim 75, further comprising an input/output terminal unit for receiving a video and/or audio program from a plurality of video and/or audio program sources" (0028, 1-5).

Regarding claim 80, Nanki is silent about the video recording/reproducing apparatus, wherein: the interface unit further receives a request signal to display a menu to access a plurality of major functions pertaining to the video recording/reproducing apparatus, and the main control unit further provides the menu comprising one or more of digital recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus.

Bolanos discloses program name information editing by user on program guide which reads on "the video recording/reproducing apparatus, wherein: the interface unit further receives a request signal to display a menu to access a plurality of major functions pertaining to the video recording/reproducing apparatus, and the main control unit further provides the menu comprising one or more of digital recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus" (Column 4, 66-67 and Column 5, 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs guide information editing as taught by Bolanos in order to provide a more flexible program guide.

Regarding claim 81, Nanki discloses two functional buttons of the recoding device configured to reserve a program or display more details of a program which reads on "the video recording/reproducing apparatus, wherein the request signal to display the information regarding video and/or audio programs corresponds to a selection of the digital recorder submenu" (figure 5, 303, 304).

Regarding claim 82, Nanki discloses requesting the contents of a recording medium of a receiving, recording and reproducing device using a remote controller which reads on "an interface unit for receiving a request signal to display the information regarding the video and/or audio programs stored in the storage device;" (0062) in addition Nanki discloses displaying a program guide with program title information which reads on "and a main control unit for providing information comprising: one or more of

title information, recording date information and reproducing time information of one of the video and/or audio programs" (0065, figure 5).

Nanki is silent about images corresponding to the respective video and/or audio programs. Bolanos discloses a list of audiovisual programs wherein each program has a corresponding image shown in a separate window which reads on "images corresponding to the respective video and/or audio programs" (Column 4, 50-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding images as taught by Bolanos in order to provide help in making audiovisual program selection.

Regarding claim 83, Nanki discloses MPEG-2 encoded video/audio data for listed programs which reads on "the apparatus, wherein the video and/or audio programs stored in the storage device are data compressed according to MPEG compression format" (0056).

Regarding claim 84, Nanki discloses DVD as the recording medium which reads on "a video recording/reproducing apparatus comprising the apparatus, further comprising the storage device to store the video and/or audio programs" (0052).

3. Claims 25-28, 52, and 89-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Bolanos, and further in view of Legrand US Patent 6,020,930 (hereinafter referred to as Legrand).

Regarding claim 25, Nanki and Bolanos are silent about the method, wherein the displaying of the program list comprises displaying a list of the video and/or audio

programs and images corresponding to the respective video and/or audio programs of the list. Legrand discloses list of audio visual programs with corresponding still images which reads on "the method, wherein the displaying of the program list comprises displaying a list of the video and/or audio programs and images corresponding to the respective video and/or audio programs of the list" (column 6, lines 33-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding still images as taught by Legrand in order to provide an easy selection of programs of interest.

Regarding claim 26, Nanki and Bolanos are silent about the method, wherein the displaying of the program list comprises displaying the information regarding the video and/or audio programs in a predetermined order and images corresponding to the respective video and/or audio programs. Legrand discloses list of audio visual programs with corresponding still images wherein user can predetermine the order of the images in the picture guide which reads on "the method, wherein the displaying of the program list comprises displaying the information regarding the video and/or audio programs in a predetermined order and images corresponding to the respective video and/or audio programs" (Column 7, 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding still images as taught by Legrand in order to provide an easy selection of programs of interest.

Regarding claim 27, Nanki discloses a program title information in a program guide which reads on "the method, wherein the information regarding the video and/or audio programs comprises one or more of title information, recording date information, and reproducing time information of each of the video and/or audio programs" (0054).

Regarding claim 28, Nanki and Bolanos are silent about the method, wherein the images are displayed according to the predetermined order of the information. Legrand discloses list of audio visual programs with corresponding still images wherein the corresponding image appears in separate window and programs are listed in a sequence predetermined by user which reads on "the method, wherein the images are displayed according to the predetermined order of the information" (Column 7, 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding still images as taught by Legrand in order to provide help in selecting programs of interest.

Regarding claim 52, Nanki and Bolanos are silent about the method, wherein the displaying of the information comprises displaying the one or more of title information, recording date information and reproducing time information of the one of the video and/or audio programs in response to a selection of a corresponding one of the images being displayed. Legrand discloses a list of rerecorded programs wherein their recording dates ranked from oldest to newest which reads on "the method, wherein the displaying of the information comprises displaying the one or more of title information, recording date information and reproducing time information of the one of the video

and/or audio programs in response to a selection of a corresponding one of the images being displayed" (figures, 7, 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include a recorded program list sorted from oldest to newest as taught by Legrand in order to provide a visually selectable program list.

Regarding claim 89, Nanki discloses a program title information in a program guide which reads on "the video recording/reproducing apparatus, wherein the information comprising the one or more of title information, recording date information and reproducing time information of the one of the video and/or audio programs is displayed" (0054).

Nanki is silent about in response to a selection of a corresponding one of the images being displayed. Legrand discloses selecting a program to watch by selecting a still image corresponding to a particular channel which reads on "in response to a selection of a corresponding one of the images being displayed" (figure 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include a still image program guide as taught by Legrand in order to provide fast scene selections.

Regarding claim 90, Nanki and Bolanos are silent about the method wherein the information of a plurality of said video and/or audio programs are simultaneously displayed and where an image of each of said video and/or audio programs is displayed on the display screen.

Legrand discloses nine still images corresponding to nine channels all displayed on the same screen at the same time which reads on "the method wherein the information of a plurality of said video and/or audio programs are simultaneously displayed and where an image of each of said video and/or audio programs is displayed on the display screen" (figure 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include a still image program guide as taught by Legrand in order to provide a child friendly guide.

Regarding claim 91, Nanki and Bolanos are silent about the method wherein each of said images is a still image extracted from said video and/or audio programs.

Legrand discloses extracting the I-frame of an MPEG-2 bit stream which reads on "the method wherein each of said images is a still image extracted from said video and/or audio programs" (Column 9, 44-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include a still image program guide as taught by Legrand in order to provide a child friendly guide.

4. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Bolanos, in view of Legrand, and further in view of Ellis et al US Patent Publication 2003/0149988 (hereinafter referred to as Ellis).

Regarding claim 29, Nanki, Bolanos and Legrand are silent about the method, wherein the information regarding the video and/or audio programs comprises the recording date information of each of the video and/or audio programs, and the

recording date information are displayed from the earliest recording date to the latest recording date. Ellis discloses a list of rerecorded programs wherein their recording dates ranked from oldest to newest which reads on "the method, wherein the information regarding the video and/or audio programs comprises the recording date information of each of the video and/or audio programs, and the recording date information are displayed from the earliest recording date to the latest recording date" (figure 18d.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include a recorded program list sorted from oldest to newest as taught by Ellis in order to provide a chronological menu.

5. Claims 44-45, 49-50, and 85-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Bolanos, and further in view of Ellis.

Regarding claim 44, Nanki and Bolanos are silent about the method, further comprising: receiving a request signal to display a menu to access a plurality of major functions pertaining to the video recording/reproducing apparatus; and displaying the menu comprising one or more of digital recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus.

Ellis discloses a program guide that generates requests like rewind, fast-forward, and pause in response to a user input which reads on "the method, further comprising: receiving a request signal to display a menu to access a plurality of major functions

pertaining to the video recording/reproducing apparatus; and displaying the menu comprising one or more of digital recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus" (0163, 0164, figure 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include DVD functionalities as taught by Ellis in order to provide a user friendly interface.

Regarding claim 45, Nanki discloses two functional buttons of the recoding device configured to reserve a program or display more details of a program which reads on "the method wherein the request signal to display the information regarding video and/or audio programs corresponds to a selection of the digital recorder submenu" (figure 5, 303, 304).

Regarding claim 49, Nanki and Bolanos are silent about the method, further comprising: receiving a request signal to display a menu to access a plurality of major functions pertaining to the video recording/reproducing apparatus; and displaying the menu comprising one or more of digital recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus.

Ellis discloses a program guide that generates requests like rewind, fast-forward, and pause in response to a user input which reads on "the method, further comprising: receiving a request signal to display a menu to access a plurality of major functions pertaining to the video recording/reproducing apparatus; and displaying the menu

comprising one or more of digital recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus" (0163, 0164, figure 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include DVD functionalities as taught by Ellis in order to provide a user friendly interface.

Regarding claim 50, Nanki discloses two functional buttons of the recoding device configured to reserve a program or display more details of a program which reads on "the method, wherein the request signal to display the information regarding video and/or audio programs corresponds to a selection of the digital recorder submenu" (figure 5, 303, 304).

Regarding claim 85, Nanki and Bolanos are silent about the video recording/reproducing apparatus, wherein: the interface unit further receives a menu request signal to access a plurality of major functions pertaining to the video recording/reproducing apparatus; and the main control unit further provides the menu comprising one or more of digital recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus.

Ellis discloses a program guide that generates requests like rewind, fast-forward, and pause in response to a user input which reads on "the video recording/reproducing apparatus, wherein: the interface unit further receives a menu request signal to access a plurality of major functions pertaining to the video recording/reproducing apparatus; and the main control unit further provides the menu comprising one or more of digital

recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus" (0163, 0164, figure 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include DVD functionalities as taught by Ellis in order to provide a user friendly interface.

Regarding claim 86, Nanki discloses two functional buttons of the recoding device configured to reserve a program or display more details of a program which reads on "the video recording/reproducing apparatus, wherein the request signal to display the information regarding video and/or audio programs corresponds to a selection of the digital recorder submenu" (figure 5, 303, 304).

6. Claims 46, 51, and 87-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Bolanos, in view of Ellis, and further in view of Smyers US Patent 6,247,069 (hereafter referenced as Smyers) .

Regarding claim 46, Nanki, Bolanos and Ellis are silent about the method, wherein the video and/or audio programs are stored in a hard disc drive of the video and/or audio recording/reproducing apparatus. Smyers discloses an audio and video storage device AVHDD which reads on "the method, wherein the video and/or audio programs are stored in a hard disc drive of the video and/or audio recording/reproducing apparatus" (figure 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of storing audiovisual data of Nanki to include AVHDD as taught by Smyers in order to easy method of storage searching.

Regarding claim 51, Nanki, Bolanos and Ellis are silent about the method, wherein the video and/or audio programs are stored in a hard disc drive of the video and/or audio recording/reproducing apparatus. Smyers discloses an audio and video storage device AVHDD which reads on "the method, wherein the video and/or audio programs are stored in a hard disc drive of the video and/or audio recording/reproducing apparatus" (figure 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of storing audiovisual data of Nanki to include AVHDD as taught by Smyers in order to easy method of storage searching.

Regarding claim 87, Nanki, Bolanos and Ellis are silent about the video recording/reproducing apparatus, wherein the storage device is a hard disc drive. Smyers discloses an audio and video storage device AVHDD which reads on "the video recording/reproducing apparatus, wherein the storage device is a hard disc drive" (figure 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of storing audiovisual data of Nanki to include AVHDD as taught by Smyers in order to easy method of storage searching.

Regarding claim 88, Nanki, Bolanos and Ellis are silent about the video recording/reproducing apparatus, further comprising an input/output terminal unit for receiving a video and/or audio program from a plurality of video and/or audio program sources. Smyers discloses a recording and reproducing apparatus (AVHDD) capable of receiving input from STB 26, Controller 80, camera 28, and computer 20 which

reads on "the video recording/reproducing apparatus, further comprising an input/output terminal unit for receiving a video and/or audio program from a plurality of video and/or audio program sources" (figure 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify recording and reproducing device of Nanki to include the capability of receiving from multiple devices as taught by Smyers in order to be adaptable to multiple distribution networks.

7. Claims 32, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Bolanos, and further in view of Smyers.

Regarding claim 32, Nanki and Bolanos are silent about the method, wherein the video and/or audio recording/reproducing apparatus is provided to receive a video the method, wherein the video and/or audio recording/reproducing apparatus is provided to receive a video and/or audio program from a plurality of video and/or audio program sources and/or audio program from a plurality of video and/or audio program sources.

Smyers discloses a recording and reproducing apparatus (AVHDD) capable of receiving input from STB 26, Controller 80, camera 28, and computer 20 which reads on "the method, wherein the video and/or audio recording/reproducing apparatus is provided to receive a video and/or audio program from a plurality of video and/or audio program sources" (figure 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify recording and reproducing device of Nanki to

include the capability of receiving from multiple devices as taught by Smyers in order to be adaptable to multiple distribution networks.

Regarding claim 79, Nanki and Bolanos are silent about the video recording/reproducing apparatus, wherein the storage device is a hard disc drive. Smyers discloses an audio and video storage device AVHDD which reads on "the video recording/reproducing apparatus, wherein the storage device is a hard disc drive" (figure 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of storing audiovisual data of Nanki to include AVHDD as taught by Smyers in order to easy method of storage searching.

8. Claims 57-59, and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Legrand.

Regarding claim 57, Nanki is silent about the apparatus, wherein the program list comprises the information regarding the video and/or audio programs in a predetermined order and images corresponding to the respective video and/or audio programs. Legrand discloses list of audio visual programs with corresponding still images wherein user can predetermine the order of the images in the picture guide which reads on "the apparatus, wherein the program list comprises the information regarding the video and/or audio programs in a predetermined order and images corresponding to the respective video and/or audio programs" (Column 7, 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs

with their corresponding still images as taught by Legrand in order to provide an easy selection of programs of interest.

Regarding claim 58, Nanki discloses a program title information in a program guide which reads on "the apparatus, wherein the information regarding the video and/or audio programs comprises one or more of title information, recording date information, and reproducing time information of each of the video and/or audio programs" (0054).

Regarding claim 59, Nanki is silent about the apparatus, wherein the images are displayed according to the predetermined order of the information. Legrand discloses list of audio visual programs with corresponding still images wherein the corresponding image appears in separate window and programs are listed in a sequence predetermined by user which reads on "the apparatus, wherein the images are displayed according to the predetermined order of the information" (Column 7, 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs with their corresponding still images as taught by Legrand in order to provide help in selecting programs of interest.

Regarding claim 92, Nanki is silent about the apparatus wherein the main control unit displays the program list comprising information of a plurality of said video and/or audio programs are simultaneously displayed and where an image of each of said video and/or audio programs is displayed on the display screen.

Legrand discloses nine still images corresponding to nine channels all displayed on the same screen at the same time which reads on "the apparatus wherein the main control unit displays the program list comprising information of a plurality of said video and/or audio programs are simultaneously displayed and where an image of each of said video and/or audio programs is displayed on the display screen" (figure 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include a still image program guide as taught by Legrand in order to provide a child friendly guide.

9. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Legrand, and further in view of Ellis.

Regarding claim 60, Nanki and Legrand are silent about the apparatus wherein the information regarding the video and/or audio programs comprises the recording date information of each of the video and/or audio programs, and the recording date information are displayed from the earliest recording date to the latest recording date.

Ellis discloses an apparatus for listing rerecorded programs wherein their recording dates are ranked from oldest to newest which reads on "the apparatus wherein the information regarding the video and/or audio programs comprises the recording date information of each of the video and/or audio programs, and the recording date information are displayed from the earliest recording date to the latest recording date" (figure 18d.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include a recorded

program list sorted from oldest to newest as taught by Ellis in order to provide a chronological program list.

10. Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Legrand, and further in view of Bolanos.

Regarding claim 61, Nanki and Legrand are silent the apparatus, wherein: the interface unit further receives a request signal to edit the information corresponding to respective one of the video and/or audio programs; and the main control unit further provides a user input screen to facilitate the editing of the information corresponding to the respective one of the video and/or audio programs.

Bolanos discloses program name information editing by user on program guide which reads on "the apparatus, wherein: the interface unit further receives a request signal to edit the information corresponding to respective one of the video and/or audio programs; and the main control unit further provides a user input screen to facilitate the editing of the information corresponding to the respective one of the video and/or audio programs" (Column 4, 66-67 and Column 5, 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include programs guide information editing as taught by Bolanos in order to provide a more flexible program guide.

11. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Kwon US Patent 5,418,658, in view of Nozaki et al US Patent 6,396,998, and

further in view of Yamagishi US Patent 5,857,059 (hereafter referenced as Kwon, Nozaki and Yamagishi).

Regarding claim 67, Nanki discloses a receiving unit 11 configured to receive television broadcast signals which reads on "a tuner for adjusting a receiving channel in order for a broadcast signal to be received through the input/output terminal unit" (figure 2), Nanki discloses a signal selection means (figure 2, 17), however Nanki is silent about a switching unit for selectively and mutually connecting input/output terminals of the input/output terminal unit connected to the switching unit.

Kwon discloses selector 14 connected to input port 12 and recording unit output port 36 which reads on "a switching unit for selectively and mutually connecting input/output terminals of the input/output terminal unit connected to the switching unit" (see drawing).

Because both Nanki and Kwon discloses a switching device, it would have been obvious to one skilled in the art to substitute one switch for the other to achieve a predictable switching device.

Nanki discloses a control unit 14, to control the output of the tuner via multiplexer 12 and switch 17 which reads on "an input/output control unit for controlling the tuner and the switching unit" (figure 2).

Nanki discloses decoder 15 which reads on "a video decoder for decocoding and outputting video signal received" (figure 2). Nanki is silent about through one of the input/output terminal unit and the switching unit. Kwon discloses outputting signals from

a recording unit 34 to selector 14 which reads on "through one of the input/output terminal unit and the switching unit" (see drawing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify recording and reproducing device of Nanki to include running output signals via switching unit as taught by Kwon in order to support simultaneous recording and reproducing of video signals.

Nanki is silent about an audio A/D converter for digitizing an analog audio signal which is selected via the switching unit. Nozaki disclose an A/D converter 16A converting analog signals to digital an inputting into a selector 16B which reads on "an audio A/D converter for digitizing an analog audio signal which is selected via the switching unit" (figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify recording and reproducing device of Nanki to include an A/D converter to convert analog signals to digital as taught by Nozaki in order for the recoding and reproducing device to support analog signal broadcast.

Nanki discloses an encoder to encode the signals to be stored on recording medium 200 in MPEG format which reads on " an encoder for encoding video signal from the video decoder according to a predetermined compression format, and storing the encoded data in the storage device" (0036, 0056). Nanki is silent about encoding the analog audio signal from the audio A/D converter. Nozaki discloses 16A outputting its signal into and audio encoder 16D which reads on "encoding the analog audio signal from the audio A/D converter" (figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify encoder of Nanki to support A/D conversion as taught by Nozaki in order for the recording and reproducing device to support both analog and digital signals.

Nanki is silent about a data management unit for managing data with respect to the storage device. Yamagishi discloses a hard disk unit 12 with a data management area 19 which reads on "a data management unit for managing data with respect to the storage device" (figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify recording and reproducing device of Nanki to include a storage management device as taught by Yamagishi in order to optimize data memory.

Nanki discloses an audio D/A converter 19 converting the signals from the decoder 15 to the display which reads on "an audio D/A converter for converting a digital audio signal output from a decoder into an analog audio signal" (figure2). Nanki is silent about outputting the converted signal to the switching unit. Kwon discloses outputting signals from a recording unit 34 to selector 14 which reads on "outputting the converted signal to the switching unit" (see drawing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify recording and reproducing device of Nanki to include running output signals via switching unit as taught by Kwon in order to support simultaneous recording and reproducing of video signals.

Nanki further discloses that the decoder 15 is configured to decode video data which reads on "a video encoder for encoding a video signal output from the decoder" (0036). Nanki is silent about outputting the converted signal to the switching unit. Kwon discloses outputting signals from a recording unit 34 to selector 14 which reads on "outputting the converted signal to the switching unit" (see drawing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify recording and reproducing device of Nanki to include running output signals via switching unit as taught by Kwon in order to support simultaneous recording and reproducing of video signals.

12. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanki, in view of Ellis.

Regarding claim 68, Nanki is silent about the video recording/reproducing apparatus, wherein: the interface unit further receives a menu request signal to access a plurality of major functions pertaining to the video recording/reproducing apparatus, and the main control unit further provides a menu comprising one or more of digital recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus.

Ellis discloses a program guide that generates requests like rewind, fast-forward, and pause in response to a user input which reads on "the video recording/reproducing apparatus, wherein: the interface unit further receives a menu request signal to access a plurality of major functions pertaining to the video recording/reproducing apparatus, and the main control unit further provides a menu comprising one or more of digital

recorder, juke box player, and photo album submenus corresponding to the respective functions of the video recording/reproducing apparatus" (0163, 0164, figure 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program guide of Nanki to include DVD functionalities as taught by Ellis in order to provide an interface that supports time shifted television viewing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY BANTAMOI whose telephone number is (571)270-3581. The examiner can normally be reached on Monday - Friday 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272 7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2623

Anthony Bantamoi
Examiner
Art Unit 2623

/Anthony Bantamoi/
Examiner, Art Unit 2623

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2623